

WHAT IS CLAIMED IS:

1. An amplifier formed on a silicon substrate, comprising:

first and second differential legs, each driving first and second resistive loads;

said first resistive load comprising first and second parallel resistive loads
connected on one side thereof to one end of said first differential leg and the other side of each of
5 said first and second parallel resistive loads separately connected to a first reference voltage;

said second resistive load comprising third and fourth resistive loads each connected
on one side thereof to one end of said second differential leg and the other side of each of said third
and fourth parallel resistive loads connected separately to said first reference voltage;

each of said first, second, third and fourth resistive loads fabricated of a strip of
10 resistive material disposed on the surface of the substrate and having a finite resistivity, length,
width and thickness;

said first parallel resistive load disposed adjacent to a first dummy resistive strip
on one side thereof and capacitively coupled thereto, and disposed adjacent said third parallel
resistive load on the opposite side thereof and capacitively coupled thereto;

15 said third parallel resistive load disposed adjacent a second dummy resistive strip
disposed on the diametrically opposite side thereof from said first parallel resistive load and
capacitively coupled thereto;

said fourth parallel resistive load disposed adjacent said second dummy resistive
strip and capacitively coupled thereto on the diametrically opposite side thereof from said third
20 parallel resistive load;

said second resistive load disposed adjacent said fourth parallel resistive load on
the side diametrically opposite to said second dummy resistive strip and capacitively coupled
thereto;

said second parallel resistive load disposed adjacent a third dummy resistive strip
25 on the side thereof diametrically opposite to said second parallel resistive load and capacitively
coupled thereto; and

said first, second and third dummy resistive strips connected to a second reference
voltage.

2. The amplifier of Claim 1, wherein said first reference voltage and said second reference voltage are common.

3. The amplifier of Claim 2, wherein said reference voltage and said first reference voltage comprise ground.

4. The method of Claim 1, wherein each of said first, second, third and fourth resistive loads have substantially equal resistance.

5. The amplifier of Claim 4, wherein each of said first, second, third and fourth resistive loads have a dimension substantially equal to each other.

6. The amplifier of Claim 5, wherein each of said first, second, third and fourth resistive loads are disposed on the silicon substrate in a parallel manner, such that one edge of each of the first, second, third and fourth parallel resistive loads are parallel to each other.

7. The amplifier of Claim 6, wherein said first, second and third dummy resistive strips are substantially identical to said first, second, third and fourth parallel resistive loads.

8. The amplifier of Claim 1, wherein said resistive material comprises polycrystalline silicon disposed on the surface of the substrate and separated therefrom by an insulator.

9. The amplifier of Claim 1, wherein said strips of resistive material from which said first, second, third and fourth parallel resistive loads are formed are formed of a rectangular strip of resistive material and the longest edges thereof parallel to each other.

10. The amplifier of Claim 9, wherein each of said first, second and third dummy resistor strips are formed of a rectangular strip of resistive material are substantially parallel to each of said first, second, third and fourth parallel resistive loads.

11. The amplifier of Claim 1, wherein each of said first, second, third and fourth parallel resistive loads is capacitively coupled to either another of said first, second, third and fourth parallel resistive loads or one of said first, second and third dummy resistor strips by a distributed capacitance.